

We claim:

1. An electrical connector assembly having a first connector unit having a plurality of conducting sockets and a second connector unit having a plurality of conducting pins for mating engagement with the sockets, characterized by:

a selectable number of projecting members coupled to one of the connector units; and

a plurality of sensors coupled to the other of the connector units, the sensors being operatively engagable with the projecting members when the first connector unit is mated with the second connector unit, the sensors sensing absence and presence of the projecting members and generating signals indicative thereof.

2. The connector assembly of claim 1, wherein:

the sensors comprise a plurality of electronic switches, each switch closing when engaged by one of the projecting members.

3. The connector assembly of claim 1, wherein:

the selectable number is zero.

4. The connector assembly of claim 1, wherein:

one of the connector units includes a socket body; and

a hollow nose piece is mounted over one end of the socket body, the projecting members project from the nose piece.

5. The connector assembly of claim 4, wherein:

the nose piece which receives at least a portion of the socket body.

6. The connector assembly of claim 1, wherein:

the sensor units comprise a plurality of electronic switches mounted on a circuit board;

the first connector unit includes a socket member adapted to carrying a plurality of conducting sockets; and

a nose piece mountable on the socket member, the selectable number of projecting members projecting from a surface of the nose piece.

7. The connector assembly of claim 4, further comprising:

a flexible pad positioned between the switches and the nose piece 26, the pad comprising a body and a plurality of rods, each rod corresponding to one of the

switches, projecting outwardly from both sides of the body and being flexibly coupled to the body by a corresponding flexible web portion.

8. The connector assembly of claim 7, wherein:

the web portions are biased to urge the rods away from the switches and towards the nose piece.

9. The connector assembly of claim 7, wherein:

the pad includes a plurality of opening therein, the pins extending through said openings.

10. An electrical connector assembly comprising:

first and second connector units which are connectable with each other;  
a shell mounted on one of the connector units, the shell having a number of tabs projecting therefrom, the number and locations of the tabs being selectable;  
and

a set of switches are mounted on a base adjacent the other connector, the switches being engagable by the tabs so that a status of the switches represents the number and position of the tabs, the switches thereby generating electrical signals corresponding to the selectable number and positions of the tabs.

11. A connector assembly having a first connector unit for carrying a plurality of conducting sockets and a second connector unit have a plurality of conducting pins for mating engagement with the sockets, characterized by:

an identifying member mounted to one of the connector units, the identifying member having features which may be arranged in a plurality of different unique configurations; and

a plurality of sensor units operatively engagable with the features when the pins are mated with the sockets, the sensor units generating signals corresponding the configuration of the features.